

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES C. WALTERS

Appeal No. 2000-2025
Application 08/953,878

ON BRIEF

Before CALVERT, FRANKFORT, and NASE, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 to 3, 5 and 6. Claim 4 stands withdrawn from consideration under 37 CFR 1.142(b) as being directed to a nonelected species.

The claims on appeal are drawn to a conditioner roll, and are reproduced in the appendix of appellant's brief (filed June 21, 1999).

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The prior art applied in the final rejection¹ is:

Harris	1,432,243	Oct. 17, 1922
Heth	2,811,819	Nov. 5,
1957		
Hyman	3,982,385	Sept. 28, 1976
Fischer et al. (Fischer)	4,233,804	Nov. 18,
1980		
Crigger	4,797,022	Jan. 10, 1989

Appellant's admitted prior art (AAPA), consisting of the disclosure at page 1, lines 5 to 20 of the specification² and the preamble of claim 1, which is in Jepson form, i.e., as provided in 37 CFR 1.75(e).³

The appealed claims stand finally rejected under 35

U.S.C. 103(a) on the following grounds:

(1) Claims 1 to 3 and 5, unpatentable over the AAPA in view of Harris and Crigger;

(2) Claims 1 to 3 and 5, unpatentable over the AAPA in view of Official Notice;

(3) Claim 6, unpatentable over the AAPA in view of either Harris and Crigger, or in view of Official Notice, further in

¹ Any references herein to the final rejection are to the second final rejection, dated Aug. 31, 1999 (Paper No. 8).

² The Heth patent is cited at line 14.

³ See In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 535-36 (CCPA 1982)(implied admission that preamble of Jepson claim describes prior art).

view of Hyman or Fischer.

Rejection (1)

The AAPA, in particular Heth, discloses a conditioner roll having a core 37 with flutes 38, which are preferably castings, thereon, the flutes being secured to core 37 "by means of bolts 39 or the like threaded or otherwise secured in the roll 37" (col. 2, line 72, to col. 3, line 1). As shown in Figs. 6 and 7 (and described at page 1, lines 15 to 17 of appellant's specification), the bolts 39 are screwed into threaded holes in the core 37; no nuts are shown. The basis of the rejection, as stated on pages 5 to 6 of the answer, is:

In view of Harris and Crigger, one having ordinary skill in the art would have found it obvious to modify AAPA by substituting a bolt and nut arrangement for the bolt (39), wherein the bolt has ribs thereon which bite into either of the core and fluter [sic], in order to provide for a more secure and easily made connection between the fluter [sic] and the core. It is appreciated that Harris fails to provide ribs directly on the bolt. However, in light of Crigger's teaching of providing ribs directly on [a] threaded member, and in view of the holding that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art, Howard v. Detroit Stove Works, 150 U.S. 164 (1893), one would have readily appreciated that the bushing and bolt of Harris could be formed as a monolithic member, which would serve to

prevent the unwanted bolt rotation.

Alternatively, page 1, lines 14-29 of Harris demonstrate that it is known to prevent unwanted bolt rotation by providing the shank of a bolt with a square cross-section that is forced into an opening of a circular cross-section, whereby the bolt becomes anchored in the hole. Accordingly, in view of this portion of Harris one would have found it obvious to substitute such bolt-nut arrangement for the bolt (39) of Heth, in order to provide for a more secure connection between the fluter [sic] and the core member.

And in view of Crigger one would have found it obvious to use a ribbed shank in place of Harris square shank, since each would result in preventing the unwanted bolt rotation.

After fully considering the record in light of the arguments presented in appellant's supplemental appeal brief and reply brief, and in the examiner's answer, we conclude that the rejection is not well taken.

It is well settled that

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so.

ACS Hospital Sys., Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). In the present case, we do not consider that Harris and/or Crigger would have

provided any teaching, suggestion or incentive for one of ordinary skill in the art to modify the AAPA (i.e., Heth) in the manner proposed by the examiner. The purpose of the Harris device is to prevent a bolt from rotating when a nut is tightened on it (page 1, lines 14 to 31), but since this is not a problem when a bolt is screwed into a tapped hole, as the bolts 39 of Heth evidently are, it is not apparent what reason there would be for complicating the Heth apparatus by incorporating the Harris device when it would not be needed in the first place. The examiner cites Crigger as teaching providing ribs directly on the bolt of Harris, but even if this were done, it would still not have been obvious to modify Heth in view of Harris.

Moreover, we agree with the appellant that even if the prior art were combined as proposed by the examiner, the bolt would be anchored against turning in the hole, but would not also be anchored axially, as required by claim 1. The examiner asserts that because the ribbed portions of Harris and Crigger cause deformation, the ribbed element will be axially anchored to some extent (answer, page 8), but this

assertion seems speculative at best, considering that in neither reference are the ribs provided in order to axially anchor the bolt (or screw in Crigger's case).

We therefore will not sustain rejection (1) as to claim 1, nor, it follows, as to dependent claims 2, 3 and 5.

Rejection (2)

This rejection will not be sustained for essentially the same reasons as rejection (1). The examiner takes official notice of the use of a nut and ribbed neck bolt to secure structural members together, citing the definition of "bolt" in The American Heritage Dictionary of the English Language (3d Ed., 1992), and contends that it would have been obvious to use such a bolt and nut to attach the flutes of the AAPA (Heth) to the core, "to thus provide a better anchor of the bolt into the core body" (answer, page 6). However, there is no teaching to suggest that a ribbed bolt and nut would anchor the flutes of Heth to the core better than bolts 39, and we do not consider that one of ordinary skill would have been motivated to substitute one for the other. Also, as with rejection (1), the ribbed bolt would not be axially anchored

in the hole, if the substitution were made.

Rejection (3)

We will not sustain this rejection, since the additional references applied, Hyman or Fischer, do not overcome the deficiencies in rejections (1) and (2) discussed above.

Remand to the Examiner

Claims 1, 5 and 6 appear to be generic to both species disclosed by appellant, in that they include within their scope a combination in which the nut is the anchored member. We therefore remand this case to the examiner pursuant to 37 CFR 1.196(a) to consider whether any of said claims should be rejected under § 103(a) on the ground that it would have been obvious, in the interest of production efficiency and/or economy, to use internally threaded inserts or rivets to provide the threaded holes in the core 37 of Heth into which the bolts 39 are screwed. Such devices are well known in the prior art; exemplary are the "Rivnuts" and "Lok-Skrus" described in the attached publication.⁴

⁴Airframe and Powerplant Mechanics General Handbook (Fed. Aviation Admin. 1970), pp. 131 to 133.

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Conclusion

The examiner's decision to reject claims 1 to 3, 5 and 6
is reversed, and the case is remanded to the examiner.

REVERSED & REMANDED

IAN A. CALVERT)	
Administrative Patent Judge)	
)	
)	BOARD OF PATENT
CHARLES E. FRANKFORT)	
Administrative Patent Judge)	APPEALS AND
)	
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